

The institutionalization of a cleavage: How differential treatment affects state behavior in the climate negotiations

Codebook

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Contents

- 1 List of files included in the replication material
- 2 Description of the datasets and their variables
- 3 Descriptive statistics table
- 4 List of Annex I and non-Annex I parties to the UNFCCC
- 5 References, data sources and software tools used for the analysis

1. List of files included in the replication material

The replication material comprises four datasets and one R-script:

- Dataset for the type model: data_type.RData
- Dataset for the rate model (cooperative events): data_rate_coop.RData
- Dataset for the rate model (conflictual events): data_rate_confl.RData
- Independent variables in panel (country-year) format: indep_vars_annual.RData
- Replication script: replication_script.R

2.1 Dataset for the type model

File: data_type.RData

Unit of analysis: negotiation event, which comprises a sender – target – event type – event day tuple.

Period: 1995 – 2013

Variables:

sender: initiating actor (country or coalition) of the negotiation event

target: addressed actor (country or coalition)

cooperation: negotiation event has a cooperative (1) or conflictual (0) nature. Source: Castro 2017 (own coding of IISD 1995-2013).

interaction: detailed nature of negotiation event (agreement, delaying proposal, on behalf of, opposition, support). Source: Castro 2017 (own coding of IISD 1995-2013).

all_mitigation: the topic of the negotiation event is mitigation (dummy). Source: Castro 2017 (own coding of IISD 1995-2013).

criticaltopic: the topic of the negotiation event includes mitigation, principles of the Convention, or new agreements (dummy). Source: Castro 2017 (own coding of IISD 1995-2013).

topic: topic of the negotiation event (factor variable). Source: Castro 2017 (own coding of IISD 1995-2013).

ENB_Nr: issue of the Earth Negotiations Bulletin (ENB) from which this negotiation event was coded

ENB_obs: observation number within the respective ENB issue

obs_id: numeric observation ID

quote: section of text from the ENB from which this negotiation event was coded (string)

conference: UNFCCC negotiation conference covered by the coded ENB (string)

meeting: UNFCCC negotiation conference covered by the coded ENB (factor)

date: date of negotiation event

year: year of negotiation event

yeardummy: year of negotiation event (factor)

eventTime: time of negotiation events, counted as calendar days starting from first day coded (integer)

annexi_sender: sender is an Annex I country to the UNFCCC (dummy). Source: UNFCCC website.

annexi_target: target is an Annex I country to the UNFCCC (dummy). Source: UNFCCC website.

same_annex: sender and target are in the same Annex to the UNFCCC (numeric)

same_annex_factor: sender and target are in the same Annex to the UNFCCC (factor)

coalition: either sender or target is a coalition (factor)

pop_comp_sender and **pop_comp_target:** population of sender / target country (thousands). Source: World Bank 2016; data for small countries completed from UN DESA 2017.

population_sender and **population_target:** population of sender / target country (thousands). Source: World Bank 2016.

log_pop_comp_sender and **log_pop_comp_target**: logged versions of pop_comp_sender / _target

log_population_sender and **log_population_target**: logged versions of population_sender / _target

gdpcomp_sender and **gdpcomp_target**: GDP per capita PPP of sender / target country (constant 2011 intl \$). Source: World Bank 2016; data for small countries completed from UN DESA 2017 and UN Statistics 2018.

gdpcomp_sender and **gdpcomp_target**: GDP per capita PPP of sender / target country (constant 2011 intl \$). Source: World Bank 2016.

log_gdpcomp_sender and **log_gdpcomp_target**: logged versions of gdpcomp_sender / _target

log_gdpcomp_sender and **log_gdpcomp_target**: logged versions of gdpcomp_sender / _target

co2comp_sender and **co2comp_target**: per capita CO₂ emissions of sender / target country (tCO₂). Source: Olivier et al. 2016; World Bank 2016; data for small countries completed from IEA 2017; Office of Environment, Principality of Liechtenstein 2017; UN DESA 2017s; US EIA 2018.

co2comp_sender and **co2comp_target**: per capita CO₂ emissions of sender / target country (tCO₂). Source: World Bank 2016.

log_co2comp_sender and **log_co2comp_target**: logged versions of co2comp_sender / _target

log_co2comp_sender and **log_co2comp_target**: logged versions of co2comp_sender / _target

co2_comp_sender and **co2_comp_target**: total CO₂ emissions of sender / target country (ktCO₂). Source: Olivier et al. 2016; data for small countries completed from IEA 2017; Office of Environment, Principality of Liechtenstein 2017; US EIA 2018; World Bank 2016.

log_co2_comp_sender and **log_co2_comp_target**: logged version of co2_comp_sender / _target

democracy_comp_sender and **democracy_comp_target**: level of democracy of sender / target country. Combination of Freedom House and imputed Polity, obtained from Teorell et al. 2018; for two small Pacific countries, other sources were used to complete the data.

democracy_sender and **democracy_target**: level of democracy of sender / target country. Combination of Freedom House and imputed Polity, obtained from Teorell et al. 2018.

nd_gain_sender and **nd_gain_target**: ND-GAIN vulnerability and resilience index of sender / target country (0-100, 100 is better). Source: Notre Dame Global Adaptation Initiative 2017.

forest_area_comp_sender and **forest_area_comp_target**: forest area of sender / target country (% of land area). Source: World Bank 2016; missing data completed from FAO 2015.

forest_area_sender and **forest_area_target**: forest area of sender / target country (% of land area). Source: World Bank 2016.

fossilrents_comp_sender and **fossilrents_comp_target**: rents from coal, oil and natural gas production in sender / target country (% of GDP). Source: World Bank 2016; missing data completed from US EIA 2018; REEEP 2013; NREL 2016; Office of Statistics, Principality of Liechtenstein 2014; Ross and Mahdavi 2015, obtained from Teorell et al 2018.

fossil_rents_sender and **fossil_rents_target**: rents from coal, oil and natural gas production in sender / target country (% of GDP). Source: World Bank 2016.

English_sender and **English_target**: English is the official or national language or predominant in the sender / target country (dummy). Source: Lewis 2009.

interv_sender and **interv_target**: count of sender / target country's negotiation interventions in the current year. Source: Castro 2017 (own coding of IISD 1995-2013).

trade: total trade flows (imports and exports) between sender and target (current British Pounds). Source: Fouquin and Hugot 2016; missing data was imputed using data from UN DESA 2016.

log_trade: logged version of trade

total_aid: total aid flows between sender and target, including emerging donors (constant USD). Source: Tierney et al. 2011; AidData 2016; Strange et al. 2017.

log_aid: logged version of total_aid.

same_region: sender and target are located in the same geographical region (dummy). Source: Marshall et al. 1999, obtained from Teorell et al. 2018.

un_voting: UN General Assembly voting similarity index between sender and target country (0-1). Source: Voeten 2013.

same_coalition: sender and target country are members of the same negotiation coalition under the UNFCCC (dummy). Source: Castro 2017 (own coding).

same_coalition_noG77: sender and target country are members of the same negotiation coalition under the UNFCCC, excluding membership to the Group of 77 and China (dummy). Source: Castro 2017 (own coding).

coalition_member: sender and target are a coalition and one of its members (dummy). Source: Castro 2017 (own coding).

sender_outdegree: measure of past activity of current sender as sender. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

target_indegree: measure of past popularity of current target as target. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

reciprocity: tendency of actors within a dyad to reciprocate past cooperative or conflictual negotiation behavior. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

triad_fof: tendency to form closing triads with the friend of a friend. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

triad_foe: tendency to form closing triads with the friend of an enemy. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

triad_eoe: tendency to form closing triads with the enemy of an enemy. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

triad_eof: tendency to form closing triads with the enemy of a friend. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

sender_similarity: similarity of current sender's targets with other senders' targets. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

target_similarity: similarity of current target's senders with other targets' senders. Source: own analysis of cooperation data using R package *rem* (Brandenberger 2017).

Treatment of data for coalitions: Since country coalitions are included as additional actors alongside countries themselves, we generate values for the respective variables by calculating the averages across their members. In the case of population, we use the sum rather than the average to reflect the coalition's overall size. For English being a

nationally spoken language, we use the mode. The dyadic-level variables were set to zero for the coalitions. Exceptions are *aid flows* from the EU, where we have data for the EU as a donor itself; and *same region* for coalitions with a regional coverage such as the African Group. The network statistics were calculated for the coalitions in exactly the same way as for countries.

2.2 Datasets for the rate model

Files: `data_rate_coop.RData` (cooperative events) and `data_rate_confl.RData` (conflictual events)

Unit of analysis: negotiation event, which comprises a sender – target – event type – event day tuple. These datasets were obtained by transforming the data in `data_type.RData` into a survival or event history format, which implied adding instances of so-called null events. Null events are negotiation events that could have happened between a sender – target dyad in a specific point in time, but did not happen. The transformation was carried out using the R package *rem* (Brandenberger 2017). Given that the estimations necessary to calculate the network statistics and run the models took prohibitively long with the dataset containing the full set of null events, we relied on a sample of the null events: For each true event, only the past two years (730 past days) of corresponding null events were kept in the sample. This left us with a sample of 2.4 million (true and null) cooperative and 0.5 million (true and null) conflictual events.

Period: 1995 – 2013

Variables: Same as the ones in `data_type.RData`, plus:

eventDummy: observation represents a true negotiation event (1) or a null event (0). Source: own calculations using R package *rem* (Brandenberger 2017).

date_conference: year, month and location of UNFCCC negotiation conference covered by the coded ENB (string).

meeting_month: year and month of UNFCCC negotiation conference covered by the coded ENB (factor).

neg_days: time of negotiation event, counted as number of negotiation days that have passed since first day coded (numeric).

timedummy: time of negotiation events, counted as calendar days starting from first day coded (factor).

event.seq.cont: time of negotiation events, counted as calendar days starting from first day coded, with missing values for the null events (integer).

2.3 Dataset of independent variables in panel format

File: `indep_vars_annual.RData`

Unit of analysis: country – year.

Period: 1990 – 2015

Variables: Part of the variables above: this dataset includes the independent variables obtained from secondary sources used in the analysis which are originally in a panel format.

3. Descriptive statistics

Variable	Description	Obs.	Mean	Std. Dev.	Min	Max	Zeroes	Obs. without imputations	Sources
<i>Main dependent and independent variables</i>									
Cooperation	The interaction is cooperative (1) or conflictual (0)	62097	0.836	0.370	0.000	1.000	10169	62097	IISD 1995-2013, own coding
Group membership	Sender and target country are in the same annex (Annex I or non-Annex I) of the Convention (1), or not (0)	62097	0.735	0.441	0.000	1.000	16442	62097	UNFCCC website
Group membership, 3 categories	Sender and target country are in different annexes (0), together in non-Annex I (1), or together in Annex I (2)	62097	0.944	0.686	0.000	2.000	16442	62097	UNFCCC website
Mitigation	Topic of the interaction is mitigation (1) or not (0)	62097	0.200	0.400	0.000	1.000	49654	62097	IISD 1995-2013, own coding
Critical topic	Topic of the interaction is critical (mitigation, principles, new agreements) (1), or not (0)	62097	0.265	0.441	0.000	1.000	45651	62097	IISD 1995-2013, own coding
<i>Network statistics</i>									
Reciprocity	Tendency of actors to reciprocate past cooperative or conflictual negotiation behavior	62097	0.007	0.013	0.000	0.114	16378	62097	Own analysis
Sender outdegree	Past activity of current sender as sender	62097	0.205	0.189	0.000	1.079	2127	62097	Own analysis
Target indegree	Past popularity of current target as target	62097	0.210	0.193	0.000	1.115	2041	62097	Own analysis
Triad friend of friends	Tendency to form closing triads with the friend of a friend	62097	0.052	0.051	0.000	0.307	4422	62097	Own analysis
Triad enemy of enemies	Tendency to form closing triads with the enemy of an enemy	62097	0.013	0.014	0.000	0.099	8261	62097	Own analysis
Triad friend of enemies	Tendency to form closing triads with the friend of an enemy	62097	0.021	0.023	0.000	0.171	6866	62097	Own analysis
Triad enemy of friends	Tendency to form closing triads with the enemy of a friend	62097	0.021	0.023	0.000	0.179	6700	62097	Own analysis
Sender similarity	Similarity of current sender's targets with other senders' targets	62097	0.031	0.021	0.000	0.177	3705	62097	Own analysis
Target similarity	Similarity of current target's senders with other targets' senders	62097	0.034	0.019	0.000	0.125	2278	62097	Own analysis
<i>Control variables</i>									
Population sender	Total population of sender country (thousands). For the analysis this variable is logged.	62087	313935	855291	1.662	5565447	0	61972	World Bank 2016; UN DESA 2017
Population target	Total population of target country (thousands). For the analysis this variable is logged.	62093	360045	957406	1.662	5565447	0	61967	World Bank 2016; UN DESA 2017
Income sender	GDP per capita PPP of sender country (constant 2011 intl \$). For the analysis this variable is logged.	62075	21956	19717	88	144715	0	61006	World Bank 2016; UN DESA 2017; UN Statistics 2018
Income target	GDP per capita PPP of target country (constant 2011 intl \$). For the analysis this variable is logged.	62080	22077	19568	88	144715	0	61095	World Bank 2016; UN DESA 2017; UN Statistics 2018
CO ₂ emissions per capita sender	Per capita CO ₂ emissions of sender country (tCO ₂). For the analysis this variable is logged.	62079	6.978	6.902	0.047	54.939	0	60734	Olivier et al. 2016; World Bank 2016; IEA 2017; Office of Environment,

Variable	Description	Obs.	Mean	Std. Dev.	Min	Max	Zeros	Obs. without imputations	Sources
CO ₂ emissions per capita target	Per capita CO ₂ emissions of target country (tCO ₂). For the analysis this variable is logged.	62087	7.000	6.787	0.047	54.939	0	60805	Principality of Liechtenstein 2017; UN DESA 2017; US EIA 2018 Olivier et al. 2016; World Bank 2016; IEA 2017; Office of Environment, Principality of Liechtenstein 2017; UN DESA 2017; US EIA 2018
Democracy sender	Level of democracy of sender country (Freedom House/imputed Polity)	62047	6.968	3.221	0.000	10.000	1565	61932	Freedom House 2018, obtained from Teorell et al. 2018
Democracy target	Level of democracy of target country (Freedom House/imputed Polity)	62076	7.024	3.187	0.000	10.000	1509	61950	Freedom House 2018, obtained from Teorell et al. 2018
ND-Gain index sender	ND-GAIN Country Index, summarizing the sender's climate vulnerability with its readiness to improve resilience.	60580	56.077	14.287	22.214	81.876	0	60580	Notre Dame Global Adaptation Initiative 2017
ND-Gain index target	ND-GAIN Country Index, summarizing the target's climate vulnerability with its readiness to improve resilience.	60605	56.310	14.296	22.214	81.876	0	60605	Notre Dame Global Adaptation Initiative 2017
Forest area sender	Forest area of sender country (% of land area).	62087	32.298	20.618	0.000	98.429	216	61921	World Bank 2016; FAO 2015
Forest area target	Forest area of target country (% of land area).	62093	32.426	20.301	0.000	98.429	192	61901	World Bank 2016; FAO 2015
Fossil rents sender	Rents from coal, oil and natural gas production in sender country (% of GDP).	61691	5.347	10.241	0.000	62.791	9672	56474	World Bank 2016; US EIA 2018; REEEP 2013; NREL 2016; Office of Statistics, Principality of Liechtenstein 2014; Ross and Mahdavi 2015, obtained from Teorell et al 2018
Fossil rents target	Rents from coal, oil and natural gas production in target country (% of GDP).	61703	5.211	10.101	0.000	62.791	9423	56688	World Bank 2016; US EIA 2018; REEEP 2013; NREL 2016; Office of Statistics, Principality of Liechtenstein 2014; Ross and Mahdavi 2015, obtained from Teorell et al. 2018
Trade flows	Total trade flows between sender and target (current British Pounds). For the analysis this variable is logged.	62097	3055140567	15232287211	0	281728450560	22742	43738	Fouquin and Hugot 2016; UN DESA 2016
Aid flows	Total aid flows between sender and target, including emerging donors (constant USD). For the analysis this variable is logged.	62097	29980275	224332947	0	11872586752	51345	62097	Tierney et al. 2011; AidData 2016; Strange et al. 2017
Same region	Sender and target are located in the same geographical region (dummy).	62097	0.248	0.432	0.000	1.000	46709	62097	Marshall et al. 1999, obtained from Teorell et al. 2018
Same coalition	Sender and target are members of the same negotiation coalition (dummy; excluding the G77 and China group).	62097	0.288	0.453	0.000	1.000	44214	62097	Own coding

Variable	Description	Obs.	Mean	Std. Dev.	Min	Max	Zeroes	Obs. without imputations	Sources
Coalition member	Negotiation interaction is between a coalition and one of its members (dummy).	62097	0.039	0.194	0.000	1.000	59661	62097	Own coding
English sender	English is national or official language of sender country (dummy)	62096	0.360	0.453	0.000	1.000	33808	62096	Lewis 2009
English target	English is national or official language of target country (dummy)	62096	0.360	0.450	0.000	1.000	33261	62096	Lewis 2009
Interventions sender	Count of sender country's negotiation interventions in the current year	62093	52.990	68.800	0.000	407.000	563	62093	IISD 1995-2013, own coding
Interventions target	Count of target country's negotiation interventions in the current year	62093	54.444	69.563	0.000	407.000	567	62093	IISD 1995-2013, own coding
<i>Additional variables used in robustness checks</i>									
Total CO ₂ emissions sender	Total CO ₂ emissions of sender country (ktCO ₂). For the analysis this variable is logged.	62088	732903	1760355	3	10503137	0	60840	Olivier et al. 2016; IEA 2017; Office of Environment, Principality of Liechtenstein 2017; US EIA 2018; World Bank 2016
Total CO ₂ emissions target	Total CO ₂ emissions of target country (ktCO ₂). For the analysis this variable is logged.	62090	741826	1768511	3	10503137	0	60915	Olivier et al. 2016; IEA 2017; Office of Environment, Principality of Liechtenstein 2017; US EIA 2018; World Bank 2016
UN voting similarity	UN General Assembly voting similarity index (0-1). For the coalitions, its value was assumed to be 0.	60424	0.634	0.428	0.000	1.000	16921	60424	Voeten 2013
Same coalition (incl. G77)	Sender and target are members of the same climate negotiations coalition (dummy; including the G77 and China group).	62097	0.526	0.499	0.000	1.000	29441	62097	Own coding

4. List of Annex I and non-Annex I parties to the UNFCCC

Annex I parties	Non-Annex I parties
Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, EU, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, United States	Afghanistan, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Democratic Rep., Congo, Republic, Cook Islands, Costa Rica, Cote d'Ivoire, Cuba, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Grenada, Guatemala, Guinea-Bissau, Guyana, Haiti, Honduras, India, Indonesia, Iran, Iraq, Israel, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Korea, Democratic Rep., Korea, Republic, Kuwait, Kyrgyz Republic, Lao PDR, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Moldova, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Nicaragua, Niger, Nigeria, Niue, Oman, Pakistan, Palau, Palestine, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Rwanda, Samoa, Saudi Arabia, Senegal, Serbia, Serbia and Montenegro, Seychelles, Sierra Leone, Singapore, Solomon Islands, Somalia, South Africa, Sri Lanka, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Swaziland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Trinidad and Tobago, Tunisia, Turkmenistan, Tuvalu, Uganda, United Arab Emirates, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Yugoslavia, Zambia, Zimbabwe

5. References, data sources and software tools used for the analysis

- AidData. 2016. AidDataCore_ResearchRelease_Level1_v3.0 Dataset. Williamsburg, VA: AidData.
- Berardo, Ramiro, and John T. Scholz. 2010. Self-Organizing Policy Networks: Risk, Partner Selection, and Cooperation in Estuaries. *American Journal of Political Science* 54 (3): 632-49.
- Brandenberger, Laurence. 2017. "rem: Relational Event Models." *R Package Version 1.2.8 (software)*.
- Butts, Carter T. 2008. network: A Package for Managing Relational Data in R. *Journal of Statistical Software* 24 (2): 1-36, available at <http://www.jstatsoft.org/v24/i02/paper>.
- Butts, Carter T. 2016. sna: Tools for Social Network Analysis. *R Package Version 2.4*, available at <https://CRAN.R-project.org/package=sna>.
- Castro, Paula. 2017. Relational Data between Parties to the UN Framework Convention on Climate Change. Harvard Dataverse, V2, available at <https://doi.org/10.7910/DVN/IVLEHB>.
- Cinelli, Carlos, and Chad Hazlett. 2019. sensemakr: sensitivity analysis tools for OLS. *R Package Version 0.1.2*.
- Cinelli, Carlos, and Chad Hazlett. 2020. Making Sense of Sensitivity: Extending Omitted Variable Bias. *Journal of the Royal Statistical Society Series B: Statistical Methodology* 82 (1): 39-67.
- Csárdi, Gábor, and Tamás Nepusz. 2006. The igraph Software Package for Complex Network Research. *InterJournal Complex Systems* 1695: 1-9, available at <http://igraph.org>.
- FAO. 2015. Global Forest Resources Assessment 2015. Rome: UN Food and Agriculture Organization, available at <http://www.fao.org/3/a-i4808e.pdf>.
- Fouquin, Michel, and Jules Hugot. 2016. Two Centuries of Bilateral Trade and Gravity Data: 1827-2014. CEPII Working Paper No. 2016-14. Paris: CEPII.
- Freedom House. 2018. Freedom in the World 2018. Washington, D.C.: Freedom House.
- International Energy Agency (IEA). 2017. *CO₂ Emissions from Fuel Combustion*. Paris: OECD/IEA, available at <https://www.iea.org/publications/freepublications/publication/co2-emissions-from-fuel-combustion-highlights-2017.html>.
- International Institute for Sustainable Development. 1995-2013. *Earth Negotiations Bulletin*, vol. 12. Winnipeg: IISD.
- Leifeld, Philip. 2013. texreg: Conversion of Statistical Model Output in R to LaTeX and HTML Tables. *Journal of Statistical Software* 55 (8): 1-24, available at <http://www.jstatsoft.org/v55/i08/>.
- Lewis, M. Paul. 2009. *Ethnologue: Languages of the World, sixteenth edition*. Dallas, TX: SIL International, available at <http://www.ethnologue.com>.
- Lüdecke, Daniel. 2018. ggeffects: Tidy Data Frames of Marginal Effects from Regression Models. *Journal of Open Source Software* 3 (26): 772.
- Marshall, Monty G., Donna F. Ramsey Marshall, and Sherry M. Young. 1999. Memberships in Conventional Intergovernmental Organizations, 1952-1997. Vienna, VA: Center for Systemic Peace.
- National Renewable Energy Laboratory (NREL). 2016. Federated States of Micronesia: Pursuing a Sustainable and Resilient Energy Future.

- Notre Dame Global Adaptation Initiative. 2017. ND-GAIN Country Index. Notre Dame, IN: University of Notre Dame.
- Office of Environment, Principality of Liechtenstein. 2017. Liechtenstein's Greenhouse Gas Inventory 1990-2015. Submission of 13 April 2017 under the UNFCCC and under the KP.
- Office of Statistics, Principality of Liechtenstein. 2014. Liechtenstein in Figures 2015.
- Olivier, Jos G.J., Greet Janssens-Maenhout, Marilena Muntean, and Jeroen A.H.W. Peters. 2016. Trends in global CO₂ emissions: 2016 Report (EDGAR dataset). The Hague: PBL Netherlands Environmental Assessment Agency.
- Renewable Energy and Energy Efficiency Partnership (REEEP). 2013. Federated States of Micronesia.
- Ross, Michael, and Paasha Mahdavi. 2015. Oil and gas data, 1932-2014. Harvard Dataverse.
- Schloerke, Barret, Jason Crowley, Di Cook, Francois Briatte, Moritz Marbach, Edwin Thoen, Amos Elberg, and Joseph Larmarange. 2018. GGally: Extension to 'ggplot2'. R *package version 1.4.0*, available at <https://CRAN.R-project.org/package=GGally>.
- Strange, Austin M., Axel Dreher, Andreas Fuchs, Bradley Parks, and Michael J. Tierney. 2017. Tracking Underreported Financial Flows: Chinas Development Finance and the Aid-Conflict Nexus Revisited. *Journal of Conflict Resolution* 61 (5): 935-963.
- Teorell, Jan, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Natalia Alvarado Pachon, and Richard Svensson. 2018. The Quality of Government Standard Dataset, version Jan18. Gothenburg: University of Gothenburg.
- Tierney, Michael J., Daniel L. Nielson, Darren G. Hawkins, J. Timmons Roberts, Michael G. Findley, Ryan M. Powers, Bradley Parks, Sven E. Wilson, and Robert L. Hicks. 2011. More Dollars Than Sense: Refining Our Knowledge of Development Finance Using AidData. *World Development* 39 (11): 1891-1906.
- UN DESA. 2016. UN Comtrade Database. New York: UN Department of Economic and Social Affairs.
- UN DESA. 2017. World Population Prospects: The 2017 Revision. New York: UN Department of Economic and Social Affairs.
- UN Statistics. 2018. National Accounts Main Aggregates Database. New York: UN Statistics Division.
- US Energy Information Administration (US EIA). 2018. International Energy Statistics.
- Voeten, Erik. 2013. Data and Analyses of Voting in the UN General Assembly. In *Routledge Handbook of International Organization*, edited by Bob Reinalda. Abingdon: Routledge.
- World Bank. 2016. World Development Indicators. Online dataset. Washington, D.C.: The World Bank.